

Planetary Forecaster
What is Temperature and How Does it Differ Across Earth's Surface?
LS 1

What is the difference between heat and temperature?

Read the bulletin from *Cooperative Space Agency (CSA)* on page 8 as a class, then answer the following questions.

1. What is known about *Planet X*?

2. What information does the *CSA* still need to know about *Planet X*?

3. How does the *CSA* want you to get started?

LS 1.1
Understand the Challenge

Complete the following chart as you measure the temperature in several locations.

Location	Height (from ground)	Temperature (°C)

Share

Share your results with your class and discuss and record your answers to the following questions.

- Were all the temperature readings the same?
- What factors seemed to have affected the temperature readings?
- What factor appeared to cause the biggest difference in the temperature readings?

Update the Project Board

Before you begin the investigations and readings in this *Learning Set*, it is a good idea to update the *Project Board*. Look at the last message you received from the CSA. It asked you to think about several questions. You

may wish to add these questions to the *Project Board*. You may already have some ideas about the answers to these questions. You can add these to the board as well. The temperature readings you took outside the classroom may also have prompted some interesting questions. Note that questions you put on the *Project Board* should not have a yes/no answer. Also, the questions should help you in addressing the *Big Challenge*.